

Sub
C2
Cont
A3
a horizontal-to-vertical transition fitting having walls including a bottom wall defining a cable pathway extending from a vertical pathway portion having an open vertical access to a horizontal pathway portion having an open horizontal access on a side of said bottom wall opposite said vertical access; ?

at least one of said [wall means] including a slot
formed [within a side wall of said element] therethrough for passing a fiber exterior of said fitting [element] from said horizontal pathway to said vertical pathway, said slot extend completely from said vertical access to said horizontal access. ?

REMARKS

Applicant has reviewed the claims of this application and has amended the independent claims to more clearly recite the novel structure of the present invention. With respect to claim 1 (amended), the cable routing system includes a coupling 14 which has spaced apart walls (for example, walls 48,52) which define a space 57 which receives a wall (for example, 26) of a cable management trough. A spring 61 within the space 57 urges the trough wall 26 against the coupling wall 48.

Claim 1 (amended) includes the original recitations of claim 1 together with further detail describing the inner and outer walls of the coupling to provide for alignment and the internal spring which engages the wall of the trough and urges it against a wall of the coupling. Applicant respectfully submits that this structure is not shown or described in any of the cited

references. In Du Bois (U.S. Patent No. 3,042,351), no separate coupling element is shown. The attachment mechanism 20 does not include any double wall construction and has no internal springs for urging a trough wall against a coupling wall. Similarly, a double wall coupling with internal springs is not shown in Moritz (U.S. Patent No. 4,570,437), Klein (U.S. Patent No. 4,658,577) or German Patent '863. Also, Merckle (U.S. Patent No. 3,351,699) shows a coupling 34 which has no internal spring elements for urging a trough wall against a wall of the coupling. Instead, locking pins 50 are required to lock the trough to the coupling. Although the other references cited by the Examiner were not made a basis for rejection of original claim 1, Applicant has reviewed those references and finds no showing or suggestion of the structure of claim 1 (amended).

In addition to structurally distinguishing from the cited references, claim 1 (amended) is functionally distinguishing. The novel coupling of the present invention permits accurate and quick placement and alignment of the trough elements. Additional fastening means (such as the locking pins 50 of Merckle -- see Fig. 8 of Merckle) are eliminated. Accordingly, the present invention achieves desired coupling and alignment with minimum cost of manufacture and increased ease of installation and assembly.

With respect to claim 6, the supporting trough is identified as having a longitudinally extending slot with grooves formed in the slot which act as threads to receive a threaded

attachment member such as a bolt. Against original claim 6, the Examiner had cited German patent 2119631. With best reference to Figs. 1 and 2 of the German patent, it is apparent that the support plate 4 has an opening which does not extend substantially along its longitudinal length as best shown in Fig. 2 where discrete openings 13 and 14 are shown. Further, no threading is shown in the sidewalls of the support member. At most, separate threaded elements (such as 22 in Fig. 3) are required.

To further distinguish the structure of claim 6, claim 6 has been amended to recite that the slot in the support plate extends substantially along the entire length of the plate and that the grooves extend substantially along the length of the slot. With the structure of claim 6 (amended), accurate alignment of the support plate relative to the trough is not necessary. Instead, a threaded bolt can be used to attach a trough at any location on the support plate since the longitudinally extending threads permit attachment at any location along their length. As a result, the present support plate acts as a universal location for making attachments without the need for accurate cutting or alignment.

With respect to claim 8, claim 8 refers to the transition element shown in Figs. 10 through 16. Claim 8 has been amended to identify the transition element as having a vertical access opening (112) and a horizontal access opening (110). The slot 108 is identified as extending completely from

the vertical access to the horizontal access. Applicant respectfully submits that this structure is not shown or suggested in any of the cited references. In the original rejection, the Examiner cited Merckle to show the transition. Particularly, the Examiner directed Applicant's attention to element 25 in Merckle. With best reference to Fig. 6 of Merckle, element 25 does not include a slot on the side walls extending substantially from the horizontal to the vertical access openings. Instead, a continuous access opening is provided on the top of the transition element 25. The access opening is covered with a cover 59. As a result, in order to locate, replace or add cables, the cover must be removed. Applicant's invention permits such removal or replacement without moving the cover. Further, in Merckle, the access opening on the vertical surface and the horizontal surface extend along the same side of the transition element 25. In Applicant's invention, the vertical opening is on a side of the concave wall 106 opposite the horizontal opening. This structure has been added to claim 8 as a further distinguishing element.

With the present amendments, Applicant has amended the claims in a manner which clearly distinguishes from the prior art. Specifically, each of the independent claims presents structure not shown or suggested by any of the cited references. Also, Applicant has amended the claims to address the Examiner's rejection under 35 U.S.C. § 112. Applicant respectfully submits

that this application is now in condition for allowance.

Reconsideration and Notice of Allowance are solicited.

Respectfully submitted,

Roy Henneberger

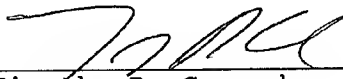
By their Attorneys,

MERCHANT, GOULD, SMITH, EDELL
WELTER & SCHMIDT, P.A.
3100 Norwest Center
90 South Seventh Street
Minneapolis, Minnesota 55402
(612) 336-4615

Date

3/24/92

By


Timothy R. Conrad
Reg. No. 30,164